



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: : Group Art Unit: 2171

: Examiner C. L. Nguyen

Margaret G. MacPhail : Intellectual Property

Serial No: 10/042,107 : Law Department - 4054

Filed: 01/08/2002 : International Business

Title: A NETWORK DATABASE : Machines Corporation

SYSTEM FOR PROVIDING DATABASE: 11400 Burnet Road

OUTPUT IN A PLURALITY OF : Austin, Texas 78758

STRINGS OF SEQUENTIAL DATA :

SEGMENTS THROUGH A USER :

INTERFACE WITH DIMENSIONS :

LIMITING THE DATA CAPACITY OF :

EACH SEGMENT

Date: 4/17/05

#### BRIEF ON APPEAL

Commissioner for Patents P.O.Box 1450 Alexandria, VA 22313-1450

Sir:

This is an Appeal from the Final Rejection of Claims 1-36 of this Application. VIII. Appendix containing a copy of each of the Claims is attached.

#### I. Real Party in Interest

The real party in interest is International Business Machines Corporation, the assignee of the present Application.

04/20/2005 AADDFD1 00000033 090447 10042107 01 FC:1402 500.00 DA

# II. Related Appeals and Interferences None

#### III. Status of Claims

### A. TOTAL NUMBER OF CLAIMS IN APPLICATION

There are 36 claims in this Application.

#### B. STATUS OF ALL THE CLAIMS

- 1. Claims cancelled: None.
- Claims withdrawn from consideration but not cancelled: None.
- 3. Claims pending: 1-36.
- 4. Claims allowed: None.
- 5. Claims rejected: 1-36.

#### C. CLAIMS ON APPEAL

Claims on appeal: 1-36.

#### IV Status of Amendments

No amendments have been filed after Final Rejection.

### V. Summary of Claimed Invention

The present invention addresses the problem of optimizing data stored in a database so that it may be easily and conveniently used for the limited size i.e. small display interfaces of PDAs, personal palm devices and cellular telephones. Simply stated, the present invention addresses this problem by providing a database wherein different types of data intended to be presented on such limited interfaces are stored in the database in the form of strings of sequential data segments, each segment having a content which fits the device display size. When strings of segments of a data type are selected by a user at a display station, the strings of segments are provided by the database, and the segments in the string are sequentially displayed where they each fit the dimensions of the limited display.

#### VI. Grounds of Rejection

Claims 1-3, 8-11, 13-15, 20-23, 25-27, and 32-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Shin et al. (US6,674,439).

Claims 4-7, 12, 16-19 24, 28-31, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin et al. in view of Guck (US5,864,870).

Claims 12, 24, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin et al. in view of Guck (US5,864,870), further in view of the Benschoter Publication (US2003/0101230).

#### VII. Applicant's Argument

Claims 1-3, 8-11, 13-15, 20-23, 25-27, and 32-35 are not anticipated by Shin under 35 USC 102(e).

A rejection based on anticipation under 35 U.S.C. 102, must expressly or impliedly teach every element of the invention without modification. The Examiner's application of the Shin patent does not meet this standard.

Most significantly, every claim in this Application requires the storage in a database of a plurality of strings of segments of data of a selected data type. Each stored segment of the stored string has a capacity which is determined by the limited dimensions of the display screen on which the data is to be presented.

#### Attention is directed to representative claim 1.

1. A computer controlled database system for providing a user with database output through a user interface having predefined dimensions limiting the capacity of each iterative segment of output comprising:

a database for storing a plurality of different types of output data including:

means for storing in said database data segments for each of the different types of stored data, each segment having a capacity limited by said predefined dimensions of said user interface; and

means for <u>storing in said database a plurality of</u>
<u>strings of said segments</u>, each string including a sequence
of segments of one different type of stored data;

means <u>enabling</u> a user to select one of said strings of segments to be output; and

means for <u>outputting said selected string of segments</u> at said user interface.

Shin has goals similar to those of the present invention i.e. it does seek to reduce conventional image sizes so that these images may be presented on devices such as cellular telephones or palm held computers. However, the method and system of Shin for achieving this goal is quite different, and certainly does not teach the present invention. For the teaching of the present invention, the Examiner particularly points to Fig. 4, and its description at column 12 of Shin. This disclosure of Shin does not disclose storing in a database, a plurality of strings of segments in which each stored segment has a capacity limited by the dimensions of the user interface display.

For the teaching of the means for storing of a plurality of strings of display interface limited segments, the Examiner points to element 408, Fig. 4 in Shin.

However, column 12 in Shin describes element 408 as an accumulative image storage unit in which images pulled off of the Web or Internet by image obtaining unit 407 are stored. There is no description setting forth that these accumulating images in the accumulative image storage unit 408 are in any way stored as a plurality of strings of segments.

The Internet or Web images in Shin in Accumulation Image Storage Unit 408 have to be dynamically processed before any images are output. There is not outputting of the claimed already stored string of image segments at the user interface. The Image Selecting Unit 409 first has to select one of the images in Storage Unit 408. The Oversize Decision Unit 410 then has to compare the size of the selected image to an already stored size in Size Storage Unit 404 desired for the selected display unit. Finally, the image is resized if necessary to the desired limited screen size, e.g. one segment. This dynamic process in Shin of

outputting of a sequence of dynamically produced segments on a one by one basis is not a direct teaching of outputting an already stored string of segments already limited by the size of the computer display as defined in the present claims.

Applicants submit that an anticipation rejection under 35 U.S.C. 102 requires that any alleged teaching be to the strict standard of expressly or impliedly teaching every element of the claimed invention without modification. The application of the Shin patent herein fails to meet this standard.

Claims 4-7, 12, 16-19 24, 28-31, and 36 are unobvious over Shin et al. in view of Guck (US5,864,870) under 35 U.S.C. 103(a) and thus are patentable.

These dependent claims are submitted to be patentable for all of the reasons set forth here herein above for the patentability of the basic claims. In addition, these claims all set forth a limitation: that the strings of stored data include a sequence of segments of the same type, e.g, image or text or video etc.

### Attention is directed to representative claim 4.

4. The database system of claim 3 wherein at least <u>one of said strings includes a sequence of segments of image type of data</u>.

While Guck may disclose a database of files of the same type of data, this data is not stored in the form of strings of sequential segments which may then be output as a string of sequential segments of the same type of data. Guck's structure of related item items is in the form of a database hierarchy, and there is no teaching of any output of a

string of sequential data segments of the same data type directly from storage. Even if the teaching of Shin and Guck could be combined, there would be no resulting suggestion of the storage in a database of a plurality of strings of segments of data of a selected same data type wherein each stored segment of the stored string has a capacity which is determined by the limited dimensions of the display screen on which the data is to be presented.

Claims 12, 24, and 36 are unobvious under 35 U.S.C. 103(a) over Shin et al. in view of Guck (US5,864,870), further in view of the Benschoter Publication (US2003/0101230)

These claims are submitted to be patentable for all of the reasons set forth here herein above for the patentability of the basic claims. In addition, these claims all set forth a limitation: that the strings of stored sequential data segments when output on the display are modifiable as to the sequence.

#### Attention is directed to representative claim 12.

12. The database system of claim 11 wherein said receiving display station further includes means for <u>changing the</u> order of segments to be displayed in a selected one of said plurality of strings of segments.

Even if it is conceded that it is generally known to change output sequences of displayable segments, the Benschoter Publication does nothing to make up for the basic deficiencies of the of the primary and modifying references as set forth hereinabove.

#### Conclusion

In view of the foregoing, it is submitted that:

Claims 1-3, 8-11, 13-15, 20-23, 25-27, and 32-35 are not anticipated by Shin under 35 USC 102(e);

Claims 4-7, 12, 16-19 24, 28-31, and 36 are unobvious over Shin et al. in view of Guck (US5,864,870) under 35 U.S.C. 103(a) and thus are patentable; and

Claims 12, 24, and 36 are unobvious under 35 U.S.C. 103(a) over Shin et al. in view of Guck (US5,864,870), further in view of Benschoter Publication (20030101230).

Accordingly, it is respectfully requested that the Final Rejection of claims 1-36 be reversed, and that these claims be found to be in condition for allowance

Respectfully submitted,

Attorney for Applicants Registration No. 19,226

(512) 473-2303

ALL CORRESPONDENCE SHOULD BE DIRECTED TO:

Jeffrey S. LaBaw
IPLaw Dept. - IMAD 4054
IBM Corporation
11400 Burnet Road
Austin, Texas 78758

#### VIII. Claims Appendix

- 1 1. A computer controlled database system for providing a
- 2 user with database output through a user interface having
- 3 predefined dimensions limiting the capacity of each
- 4 iterative segment of output comprising:
- 5 a database for storing a plurality of different types
- 6 of output data including:
- 7 means for storing in said database data segments
- 8 for each of the different types of stored data, each segment
- 9 having a capacity limited by said predefined dimensions of
- 10 said user interface; and
- means for storing in said database a plurality of
- 12 strings of said segments, each string including a sequence
- 13 of segments of one different type of stored data;
- means enabling a user to select one of said strings of
- 15 segments to be output; and
- means for outputting said selected string of segments
- 17 at said user interface.
  - 1 2. The computer controlled database system of claim 1
  - 2 wherein:
  - 3 said user interface is a computer controlled display
  - 4 interface; and
  - 5 said database for storing said output data is connected
  - 6 to said user interface through a network.
  - 1 3. The database system of claim 2 wherein said network is
  - 2 the World Wide Web.

- 1 4. The database system of claim 3 wherein at least one of
- 2 said strings includes a sequence of segments of image type
- 3 of data.
- 1 5. The database system of claim 3 wherein at least one of
- 2 said strings includes a sequence of segments of text type of
- 3 data.
- 1 6. The database system of claim 3 wherein at least one of
- 2 said strings includes a sequence of segments of video type
- 3 of data.
- 1 7. The database system of claim 2 wherein at least one of
- 2 said strings includes a sequence of segments of audio type
- 3 of data.
- 1 8. The database system of claim 3 wherein said computer
- 2 controlled display interface is on a receiving display
- 3 station on said World Wide Web.
- 1 9. The database system of claim 8 wherein said means for
- 2 providing said strings of data segments are associated with
- 3 said database means connected by the World Wide Web to said
- 4 receiving display station.
- 1 10. The database system of claim 9 wherein:
- 2 said World Wide Web further includes a service provider
- 3 for organizing and providing data from database sources on
- 4 said World Wide Web to said receiving display station; and
- 5 said service provider includes said means for providing
- 6 said plurality of strings of said segments to said receiving
- 7 display station.

- 1 11. The database system of claim 10 wherein said receiving
- 2 display station further includes means for selecting and
- 3 displaying one of said plurality of strings of said segments
- 4 provided to said receiving display station.
- 1 12. The database system of claim 11 wherein said receiving
- 2 display station further includes means for changing the
- 3 order of segments to be displayed in a selected one of said
- 4 plurality of strings of segments.

- 1 13. In a computer controlled database system a method for
- 2 providing a user with database output through a user
- 3 interface having predefined dimensions limiting the capacity
- 4 of each iterative segment of output comprising:
- 5 storing, in databases, a plurality of different types
- 6 of output data in the form of strings of data segments;
- 7 providing said data segments for each of the different
- 8 types of stored data, each segment having a capacity limited
- 9 by said predefined dimensions of said user interface;
- 10 providing a plurality of strings of said segments, each
- 11 string including a sequence of segments of one different
- 12 type of stored data;
- enabling a user to select one of said strings of
- 14 segments to be output; and
- outputting said selected string of segments at said
- 16 user interface.
  - 1 14. The method of claim 13 wherein:
  - said user interface is a computer controlled display
  - 3 interface; and
  - 4 said database for storing said output data is connected
  - 5 to said user interface through a network.
  - 1 15. The method of claim 14 wherein said network is the
  - 2 World Wide Web.
  - 1 16. The method of claim 15 wherein at least one of said
  - 2 strings includes a sequence of segments of image type of
  - 3 data.

- 1 17. The method of claim 15 wherein at least one of said
- 2 strings includes a sequence of segments of text type of
- 3 data.
- 1 18. The method of claim 15 wherein at least one of said
- 2 strings includes a sequence of segments of video type of
- 3 data.
- 1 19. The method of claim 14 wherein at least one of said
- 2 strings includes a sequence of segments of audio type of
- 3 data.
- 1 20. The method of claim 15 wherein said computer controlled
- 2 display interface is on a receiving display station on said
- 3 World Wide Web.
- 1 21. The method of claim 20 wherein steps of providing said
- 2 strings of data segments is carried out at said databases of
- 3 stored data connected by the World Wide Web to said
- 4 receiving display station.
- 1 22. The method of claim 21 wherein:
- 2 said World Wide Web further includes a service provider
- 3 for carrying out steps of organizing and providing data from
- 4 database sources on said World Wide Web to said receiving
- 5 display station; and
- 6 said service provider further provides said plurality
- 7 of strings of said segments to said receiving display
- 8 station.

- 1 23. The method of claim 14 further including steps of
- 2 selecting and displaying one of said plurality of strings of
- 3 said segments provided to said receiving display station.
- 1 24. The method of claim 23 further including the step of
- 2 changing the order of segments to be displayed in a selected
- 3 one of said plurality of strings of segments at a receiving
- 4 display station.

- 1 25. A computer program having program code included on a
- 2 computer readable medium for providing a user with a
- 3 database system output through a user interface having
- 4 predefined dimensions limiting the capacity of each
- 5 iterative segment of output comprising:
- database means for storing a plurality of different
- 7 types of output data including:
- 8 means for storing in said database data segments
- 9 for each of the different types of stored data, each segment
- 10 having a capacity limited by said predefined dimensions of
- 11 said user interface; and
- means for storing in said database a plurality of
- 13 strings of said segments, each string including a sequence
- 14 of segments of one different type of stored data;
- means enabling a user to select one of said strings of
- 16 segments to be output; and
- means for outputting said selected string of segments
- 18 at said user interface.
- 1 26. The computer program of claim 25 wherein:
- 2 said user interface is a computer controlled display
- 3 interface; and
- 4 said database for storing said output data is connected
- 5 to said user interface through a network.
- 1 27. The computer program of claim 26 wherein said network
- 2 is the World Wide Web.
- 1 28. The computer program of claim 27 wherein at least one
- 2 of said strings includes a sequence of segments of image
- 3 type of data.

- 1 29. The computer program of claim 27 wherein at least one
- 2 of said strings includes a sequence of segments of text type
- 3 of data.
- 1 30. The computer program of claim 27 wherein at least one
- 2 of said strings includes a sequence of segments of video
- 3 type of data.
- 1 31. The computer program of claim 26 wherein at least one
- 2 of said strings includes a sequence of segments of audio
- 3 type of data.
- 1 32. The computer program of claim 27 wherein said computer
- 2 controlled display interface is on a receiving display
- 3 station on said World Wide Web.
- 1 33. The computer program of claim 32 wherein said means for
- 2 providing said strings of data segments are associated with
- 3 said database means connected by the World Wide Web to said
- 4 receiving display station.
- 1 34. The computer program of claim 33 wherein:
- 2 said World Wide Web further includes a service provider
- 3 for organizing and providing data from database sources on
- 4 said World Wide Web to said receiving display station; and
- 5 said service provider includes said means for providing
- 6 said plurality of strings of said segments to said receiving
- 7 display station.

- 1 35. The computer program of claim 34 wherein said receiving
- 2 display station further includes means for selecting and
- 3 displaying one of said plurality of strings of said segments
- 4 provided to said receiving display station.
- 1 36. The computer program of claim 35 wherein said receiving
- 2 display station further includes means for changing the
- 3 order of segments to be displayed in a selected one of said
- 4 plurality of strings of segments.

APR 2 0 2005 33

#### PATENT 10/042,107

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE : Group Art Unit: 2171 In re application of: : Examiner C. L. Nguyen Intellectual Property Margaret G. MacPhail Law Department - 4054 Serial No: 10/042,107 International Business Filed: 01/08/2002 : Machines Corporation Title: A NETWORK DATABASE SYSTEM FOR PROVIDING DATABASE : 11400 Burnet Road OUTPUT IN A PLURALITY OF Austin, Texas 78758 Customer No. 32,329 STRINGS OF SEQUENTIAL DATA SEGMENTS THROUGH A USER INTERFACE WITH DIMENSIONS LIMITING THE DATA CAPACITY OF : EACH SEGMENT CERTIFICATE OF MAILING I hereby certify that this correspondence including a Brief on Appeal (in triplicate) is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450 on \_\_\_\_\_

TRANSMITTAL OF APPELLANTS' BRIEF UNDER 37 CFR 1.192(a)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Attached is Appellants' Brief (in triplicate) in this Appeal from a decision of the Examiner dated November 16, 2004 finally rejecting claims 1-36.

Please charge our Deposit Account No. 09-0447 in the amount of \$500.00.

The Commissioner is hereby authorized to charge any additional fee which may be required or credit any overpayment to Deposit Account No. 09-0447. A duplicate copy of this document is included.

Respectfully submitted,

. B. Kraft

Attorney for Applicants Registration No. 19,226

(512) 473-2303

### ALL CORRESPONDENCE SHOULD BE DIRECTED TO:

Jeffrey S. LaBaw
IPLaw Dept. - IMAD 4054
IBM Corporation
11400 Burnet Road
Austin, Texas 78758